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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,845

07/17/2006

Jean-Pierre Tretout

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10/20/2008

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EXAMINER

EIDE, HEIDI MARIE

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

10/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,845	<b>Applicant(s)</b> TRETOUT, JEAN-PIERRE	
	<b>Examiner</b> Heidi M. Eide	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Drawings*

1. The drawings were received on July 10, 2008. These drawings are accepted.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "the screen" in line 5. There is insufficient antecedent basis for this limitation in the claim. Claim 5 recites the limitation "the global shade" in line 5 and the limitation "these points" on line 4. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. 2001/0030748 in view of Lehmann 6,358,047.
6. Jung teaches a device for automatically determining the shade of an object , including a light source, a light sensor positioned so as to sample an area of the object, light reflected or passing through the object further comprising means for wavelength

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analysis on this light after reflection or passing through the object, these means delivering a spectrometric reading corresponding to the sampling area, characterized in that the analysis means are provided for analyzing a set of such spectrometric reading corresponding to different areas of the object. Jung further teaches the device characterized in that it comprises means provided for automatically displacing the light sampling area over an extend area of the surface object, and that the device is provided for sampling light in a plurality of points over a surface having a relief, such as a tooth, and the device further including a camera and means for displaying an image of the object as sampled by the camera, as well as means for plotting on this image a series of shade sampled at the series of sampling points at their corresponding locations on the object displayed in the screen. Jung further teaches the device characterized in that it include means for displacing a spectrometric sensor along a sampling line extending over the object. Jung teaches the method of using the device as discussed above including the steps of illuminating the object, sampling the light after reflection of the object, analyzing the wavelength of the light after reflection to establish a spectrometric reading of the object, inferring from this analysis a shade of the object. Jung further teaches the method of analyzing a set of sampled wavelengths in different areas for establishing a plurality of spectrometric readings corresponding to the different areas (par. 18-19, 97 and 170-17). Jung further teaches using the spectrometric readings for defining the shade of a material subsequently added to the object (par 244). Jung does not specifically teach identifying an average spectrometric reading from the set of spectrometric readings and allowing the user to perform a spatial selection of the object

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represented on the screen, means being provided for expressing this spatial selection as a selection of sampling points from light sampling performed on these points specifically positioned in this spatial selection and for calculating the global shade from light samplings performed on these points and the plurality of points describes at least one segment orientated longitudinally to the tooth and further describes a segment is substantially aligned with the gum. Lehmann teaches an average reading from a set of readings and allowing the user to perform a spatial selection of the object represented of the screen (as illustrated in fig. 6), means being provided for expressing this spatial selection as a selection of sampling points from light sampling performed on these points specifically positioned in this spatial selection and for calculating the global shade from light samplings performed on these points (col. 3, ll. 5-16, col. 9, ll. 21-40) and the plurality of points describes at least one segment orientated longitudinally to the tooth and further describes a segment is substantially aligned with the gum as illustrated in fig. 6. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Jung in view of Lehmann in order to optimize the color determining results to reproduce an optimum color reproduction.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heidi M. Eide whose telephone number is (571)270-3081. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Heidi Eide  
Examiner  
Art Unit 3732**

**/John J Wilson/  
Primary Examiner  
Art Unit 3732**

/Heidi M Eide/  
Examiner, Art Unit 3732

10/4/2008